

REMARKS

The Official Action mailed June 24, 2005, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Accordingly, the Applicants respectfully submit that this response is being timely filed.

The Applicants note with appreciation the consideration of the Information Disclosure Statement filed on April 5, 2004.

Claims 3-20 are pending in the present application, of which claims 3, 6, 9, 12 and 16 are independent. (It is noted that lines 4 and 4a of the Office Action Summary show that claims 1-20 are pending and that claims 1 and 2 are withdrawn; however, claims 1 and 2 were canceled in the *Amendment and Response to Restriction Requirement* filed on June 6, 2005.) Independent claims 3, 6, 9, 12 and 16 have been amended to better recite the features of the present invention. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

Paragraph 3 of the Official Action rejects claims 3-20 under the doctrine of statutory type (35 U.S.C. § 101) double patenting over claims 1-18 of U.S. Patent No. 6,716,283 to Yamaguchi et al. asserting that there is "nothing different between the two sets of claims" (page 2, Paper No. 4), *i.e.* nothing different between claims 3-20 of the present application and claims 1-18 of Yamaguchi, and that the rejection could be overcome by amending the claims "so they are no longer coextensive in scope" (*Id.*). In accordance with the Examiner's suggestion, independent claims 3, 6, 9, 12 and 16 have been amended to recite forming an active layer by patterning a crystallized semiconductor film; forming a gate insulating film over the active layer; and forming a gate electrode over the gate insulating film. The Applicants respectfully submit that the amended claims of the subject application are no longer coextensive in scope with and are patentably distinct from the claims of the Yamaguchi patent. Reconsideration of the obviousness-type double patenting rejection is requested.

Paragraph 5 of the Official Action rejects claims 3-20 as anticipated by U.S. Patent No. 5,529,630 to Imahashi et al. The Applicants respectfully traverse the rejection because the Official Action has not established an anticipation rejection.

As stated in MPEP § 2131, to establish an anticipation rejection, each and every element as set forth in the claim must be described either expressly or inherently in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

The Applicants respectfully submit that an anticipation rejection cannot be maintained against the independent claims of the present application. The independent claims of the present invention recite controlling an irradiation energy of a laser light based on a refractive index of a semiconductor film on which the laser light has been irradiated so that the refractive index of the semiconductor film is within a predetermined range. The Official Action does not show that Imahashi explicitly teaches the above-referenced features of the present application. Rather, the Official Action asserts that "Imahashi et al discloses control based on the band-gap spectral reflectance, which inherently encompasses the broadly cited control 'based' on the refractive index since the resistance is based on the refractive index" (page 3, Id.). The Applicants respectfully disagree and traverse the above-referenced assertions in the Official Action.

The measurement of band-gap spectral reflectance is different than the measurement of a refractive index. The measurement of a refractive index is performed in order to evaluate not only crystallinity but also flatness of a thin film. Also, the present invention teaches that a smaller refractive index leads to a higher crystallinity and a lower flatness of a film, and that a film having a required level of crystallinity and allowable flatness exhibits a refractive index that is within a certain range (see page 14, lines 8-18). Imahashi merely teaches obtaining a desired crystallinity by measuring the distribution of band-gap spectral reflectance (column 12, lines 40-42). Imahashi does

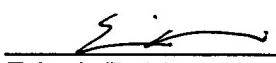
not teach the relationship between a refractive index and flatness and between a refractive index and crystallinity, either explicitly or inherently.

Furthermore, the Applicants respectfully traverse the finding of inherency, because the Official Action has not shown that controlling an irradiation energy of a laser light based on a refractive index of a semiconductor film on which the laser light has been irradiated so that the refractive index of the semiconductor film is within a predetermined range necessarily flows from the teachings of the Imahashi reference. Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). Specifically, the Official Action has not shown that the above-referenced features are necessarily present in Imahashi, and that such features would be so recognized by persons of ordinary skill in the art at the time of the present invention. Therefore, the Applicants respectfully submit that Imahashi does not teach the above-referenced features of the present invention, either explicitly or inherently.

Since Imahashi does not teach all the elements of the independent claims, either explicitly or inherently, an anticipation rejection cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 102 are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

  
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